



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/477,297	01/04/2000	JAMES R. TIGHE	062891.0381	9048

7590 07/21/2003

BAKER & BOTTS LLP  
2001 ROSS AVENUE  
DALLAS, TX 75201

EXAMINER

BLOUNT, STEVEN

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 07/21/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

B

# Office Action Summary

Application No.

09/477,297

Applicant

Tighe, et al

TV

Examiner

Blount

Group/Art Unit

2661

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 6/9/03
- ☒ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-29 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-29 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 5
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

Art Unit: 2661

## DETAILED ACTION

### *Claim Rejections - 35 U.S.C. § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 - 2, 5, 7 - 13, 15 - 25, and 27 - 29 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,449,269 to Edholm in view of U.S. patent 5,884,025 to Baehr et al.

With regard to claim 1, Edholm teaches a telephony system for communicating over the internet. Edholm does not however teach the use of a "virtual telephony intermediary" between the telephony devices (Edholm does teach the use of an intermediary controller member which manipulates the data as described in col 3 lines 10 - 30, but this is not a "virtual" intermediary).

Baehr et al teach the use of a "virtual intermediary" device between the telephony devices to help provide security by altering the source address of the packet (see col 7, lines 20 - 25) wherein the data maybe manipulated by encrypting or decrypting it, as described in col 7 lines 30 - 40.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided Edholm with a "virtual" telephony intermediary device, in light of the teachings of Baehr et al, in order to provide a method for increasing the security of the phone calls.

Art Unit: 2661

With regard to claim 2, see figure 7 and col 2 lines 10+ of Baehr et al, where a "screen" is positioned between two networks (col 2 lines 12+) as shown in figure 7 (member 340) where "a port or network interface is provided for each of the two networks" (eg, and with the devices on the networks, see col 2 lines 15+. See also col 7 lines 23+).

With regard to claim 5, UDP connections are discussed in col 1, lines 30+ of Edholm.

With regard to claims 7 - 8, col 11 lines 20+ of Edholm teach protocol conversion of an audio format.

With regard to claim 9, encrypting data is in effect replacing telecommunication data with substitute telecommunication data. See col 7 line 36.

With regard to claims 10 - 13 and 15 - 19, see the rejections above, including the following:

With regard to claim 10, see the discussion of first and second logical ports associated with first and second networks in the rejection of claim 2 (and voip in claim 1) and also network interfaces 410 and 425 (transmission modules) in figure 7; also, note the encryption/decryption mentioned in col 7 is commonly known to be carried out by an apparatus separate from the rest of the unit (eg, in modular form, said modular form as exemplified by the modules shown in figure 7). With regard to claim 11, see the rejection of claim 5 above. With regard to claim 12, the address translation mentioned in col 7 lines 20+ would be carried out by a network address translation unit of modular form similar to the modules shown in figure 7. With regard to claim 13, as noted with respect to claim 4 above, the source IP address and port information is

Art Unit: 2661

modified, and this would occur in the network address translation unit mentioned above. With regard to claim 15 - 16, see col 11 lines 20+ of Edholm. With regard to claim 17, see col 7 lines 35+ of Baehr et al. With regard to claim 18, all of the limitations are discussed above, including intermediary 340 with the capability of encrypting/decrypting the data in the payload section and transmission modules 410 and 425. With regard to claim 19, see the rejection of claim 12 above.

With regard to claim 20, with respect to the call manager generating the intermediary and establishing the communication links, note that the connections shown in figure 6 of Baehr et al are typically formed by managers that operate under the control of controllers such as that shown in figure 3 of Edholm, member 314.

With regard to claims 21 - 25 and 27 - 29, see the rejections above, and note that the information steps needed to carry out the processes associated with the members shown in figures 6 - 8 of Baehr et al is known to be implemented in software.

3. Claims 6, 14, and 26 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,449,269 to Edholm in view of U.S. patent 5,884,025 to Baehr et al as applied to claims 1 - 5, 7 - 13, 15 - 25, and 27 - 29 above, and further in view of U.S. patent 5,896,379 to Haber.

Edholm/Baehr et al teach the invention as described above, but do not teach duplicating the data (Baehr however does teach that "a wide range of other actions on the packets" may be carried out in col 2 lines 43+). This is taught in col 1 lines 48+ of Haber, apparently for broadcasting purposes.

6 4 26

Art Unit: 2661

It would have been obvious to one of ordinary skill in the art at the time of the invention to have duplicated the data in Edholm/Baehr et al, in light of the teachings of Haber, in order to provide a means for broadcasting the data to a plurality of nodes, perhaps in a conference call setting.

3. Claims 1 - 4, 7 - 10, 12 - 13, 15 - 24, and 27 - 29 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,456,615 to Kilkinis.

With regard to claims 1 - 4 and 7 - 9, note bridge 87, and note the data in the payload is changed. See column 6, lines 1+ and also column 9, lines 50+ to column 10, lines 50+ (especially col 10, line 53), column 13, lines 19+, and see how the ports of member 87 are associated with the networks 13 and 15 in figure 4. Further note the data formats are different audio encoding formats, and that at least some of the telecommunications data is substituted. While it may not be absolutely certain that the bridge is hidden (virtual) from the user, it would be obvious to try to make it appear to end users that there is not a conversion process going on for the call between them. With regard to the following claims (cl), see the following: cl 10, 18, and 21: see the rejection of claims 1 and 2; cl 12, 19, and 23: see the rejection of claim 3; cl 13 and 24: see the rejection of claim 4; cl 15 and 27: see the rejection of claim 7; cl 16 and 28: see the rejection of claim 8; cl 17 and 29: see the rejection of claim 9; cl 20: see member 63 in figure and note that it acts in conjunction with members 61 and 29. The examiner notes that the apparatus limitations are present in the method limitations, and that the processes in Kilkinis all operate through software.

Art Unit: 2661

4. Claims 6, 14, and 26 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6456615 to Kilkinis as applied above in view of U.S. patent 5,896,379 to Haber.

Kilkinis teaches the invention as described above, but does not teach duplicating the data. This is taught in Haber. See column 1, lines 48+. It would have been obvious to duplicated the data of Kilkinis in light of Haber in order to provide for the possibility of multicasting to the members in group 77 of Kilkinis.

5. Claims 5, 11, and 25 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6456615 to Kilkinis as applied above in view of U.S. patent 6,449,269 to Edholm.

Kilkinis teaches the invention as described above, including member 63 (see column 9, lines 1+) which is capable of receiving circuit switched data or IP data and sending it to router 29. However, the interfaces between 65, 69, and member 63 are not explicitly taught to be associated with UDP ports. UDP for streaming is taught in Edholm. See column 1, lines 30+. It would have been obvious, to one of ordinary skill in the art at the time of the invention, to have provided Kilkinis with UDP ports at member 63, in light of the teachings of Edholm, in order to allow for the possibility of streaming and broadcasting.

#### Response to Arguments

6. Applicant's arguments filed 6/9/03 have been fully considered but they are not persuasive. Applicant argues that "the Baehr screening system is not a virtual intermediary between

Art Unit: 2661

devices. Baehr's screening system, which functions as an intermediary between the public and private network, is comprised of hardware such as a memory, a processor, and disk storage. (Baehr, FIGURE 8). As such, the screening system is a physical device rather than a virtual intermediary, as disclosed in Claims 1, 10, 18, and 21 of the present application" (page 10, 2nd paragraph). In response, the examiner points out that applicant has merely called the device a "virtual telephony intermediary" in the claims, and has not pointed out what structure it is comprised of, or lack thereof. Of course, it must ultimately be comprised of some kind of structure, even if only written in software. The examiner has provided a reference which may very fairly be considered a "virtual" device, since, as pointed out in the abstract, "The passing through of packets without the addition of any network address pertaining to the screening system allows the screening system to function without being identifiable by such an address, and therefore is more difficult to target as an IP entity, e.g. by intruders". Finally, on page 14 of the specification, lines 25+, it is noted that "A virtual telephony device may be implemented as software, firmware and/or hardware to interact with devices in communication network 10".

As correctly observed by applicant, Baehr et al, discloses manipulating the data in a payload of a packet (page 11, lines 5+). The Internet Protocol is used on the host machine generating the message, see col 2 lines 31+; it is noted that carrying voice over IP is well known in the art and one of ordinary skill in the art would have no problem realising that using Baehr *alone* would be useful for providing security to a telephone conversation; in fact, applicant even admits that the "virtual intermediary" has, as one of its possible functions, providing such



Art Unit: 2661

security. See page 20, lines 8+ of the present application. Further, and more importantly, a telephony system is plainly and clearly taught in Edholm, "Packet Voice Telephony System And Method" (title), and it is the combination which teaches the use of telephony data in rejecting the claim (for a discussion of the motivation to combine Edholm and Baehr et al, applicant is referred to the previous Office Action).

Applicant states there are not devices at either side of the screening system. The examiner refers applicant to the rejection of this claim in the previous Office Action. Further, if there were not devices attached, then what use would the screening system be? Note again that telephony devices are taught in Edholm. Since the applicant has not argued the rejection of claim 5, it is assumed that the applicant agrees with the rejection. With regard to claims 6, 14, and 26, the examiner disagrees with the applicants assertion that neither Edholm nor Baehr disclose manipulating telecommunications data in a payload section of a packet received from a first telephony device for the reasons stated above. The same is true for claims 7 - 9, 15 - 17, and 27 - 29.

7. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

Art Unit: 2661

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

8. Examiner Blount may be contacted at the Patent Office between the hours of 9:00 am to 5:30 P.M. Monday through Friday. His phone number is (703) 305-0319.

  
Art Blount  
Pat. Ex. Blount

SB



7/16/03